

1997 Gaslo's dms

AFOSR-TR-97

188

ng data sources.
er aspect of this
1215 Jefferson
J3.

REPORT DOCUMENTATION PAGE

reporting burden for this collection of information is estimated to average 1 hour per response, including maintaining the data needed, and completing and reviewing the collection of information, including suggestions for reducing this burden, to Washington Headquarters, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, 1215 Jefferson J3.

1. AGENCY USE ONLY (Leave blank)		2. REPORT DATE	3. REPORT TYPE AND DATES COVERED	
			FINAL 15 Feb 97 to 14 Aug 97	
4. TITLE AND SUBTITLE		STRUCTURES, ENERGETICS AND DYNAMICS OF GASEOUS IONS		
5. FUNDING NUMBERS		F49620-97-1-0065 61102F 2303/ES		
6. AUTHOR(S)		Dr Robert Squires		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)		Gordon Research Conferences Gordon Research Center - URI P.O. Box 984 West Kingston, RI 02892-0984		
8. PERFORMING ORGANIZATION REPORT NUMBER		Grant No. F49620-97-1-0065		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSORING/MONITORING AGENCY REPORT NUMBER		
AFOSR/NL 110 Duncan Avenue, Room B115 Bolling AFB, DC 20332-8050				
11. SUPPLEMENTARY NOTES				
12a. DISTRIBUTION/AVAILABILITY STATEMENT		12b. DISTRIBUTION CODE		
Approved for public release; distribution unlimited.				
13. ABSTRACT (Maximum 200 words)		The Gordon Research Conference (GRC) on GASEOUS IONS, STRUCTURE, ENERGETIC, & DYNAMICS was held in Vertura, California at DOUGLETREE HOTEL, from 2/23/97 thru 2/28/97. The conference was well-attended with 130 participants (attendees list attached). The attendees represented the spectrum of endeavor in this field, coming from academia, industry, and government laboratories, both U.S. and foreign scientist, senior researchers, young investigators, and students.		
14. SUBJECT TERMS		15. NUMBER OF PAGES		
		16. PRICE CODE		
17. SECURITY CLASSIFICATION OF REPORT (U)	18. SECURITY CLASSIFICATION OF THIS PAGE (U)	19. SECURITY CLASSIFICATION OF ABSTRACT (U)	20. LIMITATION OF ABSTRACT (UL)	

**1997 GORDON RESEARCH CONFERENCE
on GASEOUS IONS, STRUCTURE, ENERG. & REACT.
FINAL PROGRESS REPORT**

**AIR FORCE OFFICE OF SCIENTIFIC RESEARCH
GRANT NO. F49620-97-1-0065**

The Gordon Research Conference (GRC) on GASEOUS IONS, STRUCTURE, ENERG. & REACT. was held in Ventura, California at DOUBLETREE HOTEL from 2/23/97 thru 2/28/97. The Conference was well-attended with 130 participants (attendee list attached). The attendees represented the spectrum of endeavor in this field coming from academic, industry, and government laboratories, both U.S. and foreign scientists, senior researchers, young investigators, and students.

In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field. There was a conscious effort to stimulate lively discussion about the key issues in the field today. Time for formal presentations was limited in the interest of group discussions. In order that more scientists could communicate their most recent results, poster presentation time was scheduled. Attached is a copy of the formal schedule and speaker program and the poster program. In addition to these formal interactions, "free time" was scheduled to allow informal discussions. Such discussions are fostering new collaborations and joint efforts in the field.

I want to personally thank you for your support of this Conference. As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings. If you wish any further details, please feel free to contact me. Thank you.

Sincerely,


ROBERT SQUIRES
PURDUE UNIVERSITY

19970602 140

Gordon Research Conference

Structures, Energetics and Dynamics of Gaseous Ions

**February 23 - 27, 1997
Doubletree Hotel, Ventura California**

R. R. Squires, Chair T. Baer, Vice Chair

Program

Sunday, February 23

- | | |
|-------------|-------------------------------|
| 2:00 PM | Registration |
| 4:30 - 6:00 | Reception & Poster Session I |
| 6:00 - 7:00 | Dinner |
| 7:00 - 7:15 | Opening Remarks/Announcements |

Evening Session: Ion-Surface Interactions

- | | |
|--------------|--|
| 7:15 - 7:30 | Discussion Leader: Steve Bernasek, Princeton University |
| 7:30 - 8:30 | Graham Cooks, Purdue University
<i>Dissociation, Reactions and Soft-Landing of Ions at Surfaces</i> |
| 8:30 - 9:30 | Vicki Wysocki, University of Arizona
<i>Two Different Facets of Ion-Surface Collisions: Peptide Dissociation and Dependence of Reactions on Orientation of Surface Chains</i> |
| 9:30 - 10:30 | Poster Session I, con'd |

Monday, February 24

7:30 - 8:30 Breakfast

Morning Session: Organic Mechanisms

8:45 - 9:00 Discussion Leader: Helmut Schwarz, Technical University of Berlin

9:00 - 10:00 Chuck DePuy, University of Colorado at Boulder
Gas-Phase Electrophilic Substitution: CH₃⁺ vs. BH₂⁺

10:00 - 10:20 Break

10:20 - 11:20 John Holmes, University of Ottawa-Carleton
Ion Structure Assignment; Certainty and Speculation

11:20 - 12:20 Hans Grützmacher, University of Bielefeld
Some Aspects of the Bimolecular Reactivity of Unsaturated Organic Radical Cations

12:30 - 1:30 Lunch

4:30 - 6:00 Poster Session II

6:00 - 7:00 Dinner

Evening Session: Atmospheric Chemistry/New Faces

7:15 - 7:30 Discussion Leader: Carl Howard, NOAA

7:30 - 8:30 Greg Huey, NOAA
Ion Chemistry for the Selective Detection of HNO₃ and Other Important Atmospheric Species

8:30 - 9:30 Kim Prather, University of California at Riverside
Real-Time Analysis of Atmospheric Aerosols

9:30 - 10:30 Poster Session II, con'd

Tuesday, February 25

7:30 - 8:30 Breakfast

Morning Session: Reaction Dynamics

8:45 - 9:00 Discussion Leader: Doug Ridge, University of Delaware

9:00 - 10:00 Chava Lifshitz, The Hebrew University of Jerusalem
Time-Resolved Studies of PAHs and Fullerenes

10:00 - 10:20 Break

10:20 - 11:20 Rob Dunbar, Case Western Reserve University
Binding Metal Ions to Planar π -Systems

11:20 - 12:20 Seung-Koo Shin, University of California at Santa Barbara
Time- and Product-Resolved Photodissociation of Toluene and Halotoluene Radical Cations

12:30 - 1:30 Lunch

4:30 - 6:00 Poster Session III

6:00 - 7:00 Dinner

Evening Session: Theory

7:15 - 7:30 Discussion Leader: Scott Gronert, San Francisco State University

7:30 - 8:30 Bill Hase, Wayne State University
Trajectory Studies of Energy Transfer in the Reaction and Dissociation of Gaseous Ions

8:30 - 9:30 Wes Borden, University of Washington
Gas-Phase Ion Chemistry as a Tool for Investigating Organic Molecules of Theoretical Interest -- The Synergy between Calculations and Experiments

9:30 - 10:30 Poster Session III, con'd

Wednesday, February 26

7:30 - 8:30 Breakfast

Morning Session: Biological/Electrospray Ionization

8:45 - 9:00 Discussion Leader: Julie Leary, University of California at Berkeley

9:00 - 10:00 Scott McLuckey, Oak Ridge National Laboratory
Gas-Phase Bio-Ion/Ion Chemistry in the Paul Trap

10:00 - 10:20 Break

10:20 - 11:20 Evan Williams, University of California at Berkeley
Blackbody Infrared Radiative Dissociation of Large Biomolecule Ions: A Route to Energetics and Dynamics

11:20 - 12:20 Mike Bowers, University of California at Santa Barbara
Conformations of Biologically Interesting Molecules in the Gas Phase: The Latest News

12:30 - 1:30 Lunch

1:30 - 2:00 Business Meeting to Select New Vice-Chair

4:30 - 6:00 Poster Session IV

6:00 - 7:00 Dinner

Evening Session: Molecular Clusters

7:15 - 7:30 Discussion Leader: Will Castleman, Pennsylvania State University

7:30 - 8:30 Michael Mautner, NIST & University of New Zealand
Multi-body Cooperative Processes: New Reactions Observed in Ionic Polymerization

8:30 - 9:30 Al Viggiano, Phillips Laboratory
Thermal Energy Reactions of Cluster Ions

9:30 - 10:30 Poster Session IV, con'd

Thursday, February 27

7:30 - 8:30 Breakfast

Morning Session: Spectroscopy/Threshold Ionization

8:45 - 9:00 Discussion Leader: Mark Johnson, Yale University

9:00 - 10:00 Carl Lineberger, JILA/University of Colorado at Boulder
Time-Resolved Dynamics in Large Cluster Ions

10:00 - 10:20 Break

10:20 - 11:20 Ed Grant, Purdue University
State-to-State Dynamics of Polyatomic Photoionization

11:20 - 12:20 Klaus Müller-Dethlefs, University of York
Structure and Dynamics of Molecular Ions and Clusters Studied by ZEKE Spectroscopy

12:30: - 1:30 Lunch

6:00 - 7:30 Conference Banquet

Evening Session: Featured Speaker

7:30 - 7:40 Introduction: Bob Squires

7:40 - 8:40 Eldon Ferguson, NOAA
Flowing Afterglow Studies of Ion-Molecule Reactions, 1964-1996

9:00 - 12:00 Social with Live Music

Friday, February 28

departure

1997 Gaseous Ions Gordon Conference Poster Sessions

Sunday Posters

1. Size Selective Protonation within $(ROH)_n(H_2O)H^+$ Cluster Ions

Michael M. Y. Lyktev, Robert L. DeLeon, and James F. Garvey

Department of Chemistry, Natural Sciences & Mathematics Complex

State University of New York, University at Buffalo, Buffalo, NY 14260-3000

2. Metal-ion chemistry in Clusters Initiated by Ionization/Dissociation of Organometallic Precursors

S. Bililign[‡], L. Liu, C. S. Feigerle and John C. Miller

Chemical and Biological Physics Section, Oak Ridge National Lab, PO Box 20008; Oak Ridge, TN 831 and

Department of Chemistry, University of Tennessee, Knoxville, TN 996

[‡] Also at Physics Department, North Carolina A&T State University, 1601 East Market St., Greensboro, NC 27411.

3. On the Dynamical Shell Structure of Hydrogen Cluster Ions

S. Schlemmer, W. Paul, and D. Gerlich

Technical University Chemnitz, Germany

4. H^+ , Li^+ , and Na^+ Affinity Study of N_2 , P_2 and their Isoelectronic Species

Yu-Nung Su, Ming-Sung Tsai, and San-Yan Chu

Department of Chemistry, National Tsing Hua University, Taiwan

5. The Gas-phase Complex [$t-C_4H_9^+/1,4\text{-Benzylbicyclo[2.2.2]octane}$]

Dietmar Kuck, Carsten Matthias and Björn Bredenkötter

Department of Chemistry, University of Bielefeld, Germany

6. Treatment of Competitive Dissociation Processes by Threshold Collision-Induced Dissociation.

Implications for the Kinetic Method.

P. B. Armentrout, and Mary T. Rodgers

Department of Chemistry, 3516 Henry Eyring Building, University of Utah, Salt Lake City, UT 84112

7. Formation and Rearrangements of Ion-Molecule Complexes Between Ethylene and Acetylene

Thomas Bally¹, G. Narahari Sastry¹, Petr Carsky², Pavel Jungwirth², Vojtech Hrouda², and Martina

Roeselova²

1) Institut de Chimie Physique, Universite de Fribourg, CH-1700 Fribourg, Switzerland

2) Academy of Sciences of the Czech Republic, Prague

8. Rate Constants for the Reactions of O^+ with N_2 and O_2 and N^+ and N_2^+ with O_2 as a Function of Temperature (300-1800K).

I. Dotan,^a P.M. Hierl,^b J.V. Seeley, J.M. VanDoren,^c R.A. Morris and A.A. Viggiano

Phillips Laboratory, Geophysics Directorate, Ionospheric Effects Division (GIED); 29 Randolph Rd.

Hanscom AFB, MA 01731. a) The Open University of Israel, 16 Klausner St., Ramat-Aviv, Tel-Aviv, ISRAEL. b) Department of Chemistry, University of Kansas, Lawrence, KS 66045. c) Department of Chemistry, College of the Holy Cross, Worcester, MA 01610.

9. Spectroscopy of Transition Metal Ions and Coordination Complexes in Cluster Environments

Thomas G. Spence, Brett T. Trotter, and Lynmarie A. Posey

Department of Chemistry, Vanderbilt University, Station B. Box 1822, Nashville, TN 37235

10. Carbanion Chemistry: Recent Results

Steven Kass, Michael Hare, Dana Reed, Kathy Broadus, and Tina Arrowood

University of Minnesota, Department of Chemistry, 207 Pleasant St. S.E., Minneapolis, MN 55455

11. PTR-MS: Medical applications, food research and air quality

W. Lindinger, A. Jordan, A. Hansel, C. Warneke, R. Holzinger, P. Prazeller, and W. Vogel

Institut für Ionenphysik, Universität Innsbruck, Technikerstrasse 25, 6020 Innsbruck, AUSTRIA

12. The ground state (1A_1) and the lowest triplet state (3B_1) of the phenyl cation $C_6H_5^+$ revisited

Jan Hrušák,^{a,c} Detlef Schröder,^b and Suehiro Iwata^c

a) Academy of Sciences of the Czech Republic, J. Heyrovsky Institute of Physical Chemistry, Cz-18223

Prague 8, Czech Republic. b) Institut für Organische Chemie der Technischen Universität Berlin, Straße des 17. Juni 135, D-10623 Berlin, Germany. c) Institute for Molecular Sciences, Myodaiji, Okazaki 444, Japan

13. Rate Constants for the Reactions of Chloride Ion with Methyl Bromide and with n-Butyl Bromide over the Pressure Range, 300 to 1100 Torr, by Ion Mobility Spectrometry

W.B. Knighton , K.E. Sahlstrom, and E.P. Grimsrud

Department of Chemistry, Montana State University, Bozeman, Montana 59717

14. Surface induced dissociation (SID) of benzene ions on self-assembled monolayer surface (SAM) by FT-ICR

Wenqing Zhong, Eugene Nikolaev*, Jean Futrell, and Vicki Wysocki**

Department of Chemistry, University of Delaware, Newark, DE 19716

*Institute of energy Problems of Chemical Physics, Russian Academy of Sciences, Russia

**Department of Chemistry, University of Arizona, Tucson, AZ 85721

15. Infrared Spectra of Molecular Ions Formed from SF₄ and SF₆ and Trapped in Solid Neon

Marilyn E. Jacox, Catherine L. Lugez, Rollin A. King, and H. F. Schaefer III

Optical Technology Division, National Institute of Standards and Technology

Gaithersburg, Maryland 20899

16. H⁻ transfer in reactions of acetylene and ethylene cations with small hydrocarbons

H. Palm, C. Alcaraz, D. Berthomieu, M. Fieber-Erdmann*, Z. Herman**, and O. Dutuit

LPCR and LURE, Centre Universitaire Paris-Sud, 91405- Orsay Cedex, France

*Synchrotron Strahlung AS, Hahn-Meitner Institut, D-14109, Berlin, Germany

**J. Heyrovsky Institute of Physical Chemistry, Academy of Sciences of the Czech Republic, Dolejskova 3, 182 23 Prague 8, Czech Republic)

17. The Acidities and Basicities of Doubly Charged Ions: An ab initio Study.

Scott Gronert

Department of Chemistry and Biochemistry, San Francisco State University

San Francisco, CA 94132

18. Hydrogen Bonding in the Gas Phase: Lessons from the Potential Energy Surface

Michael L. Chabinyc and John I. Brauman

Department of Chemistry, Stanford University, Stanford CA 94305-5080

19. Stereoselective β -Hydrogen Elimination from ESI-generated Nickel(II) N-Glycoside Complexes

Glenn Smith, Steven F. Pedersen, and Julie A. Leary

Department of Chemistry, University of California, Berkeley, CA 94720

20. Gaseous Ionized Alkylphosphines: a Rich Source of Distonic Phosphorus-Containing Ions

Helmut Keck, Andreas Schweighofer

Heinrich-Heine-Universität Düsseldorf, Institut f. Anorganische Chemie und Strukturchemie

Universitätsstr. 1, D-40025 Düsseldorf, Germany

21. VUV Peaks in Absorption Spectra and in Photoion Yield Curves of Polycyclic Aromatic

Hydrocarbons and Related Compounds

S. Leach^a, H.W. Jochims^b, E.Rühl^b, H. Baumgärtel^b, and S. Tobita^{a,b}

a) Departement Atoms et Molecules en Astrophysique, URA812, Observatoire de Paris-Meudon, 92195

Meudon, France

b) Institut für Physikalische und Theoretische Chemie, der Freien Universität Berlin, Takustr. 3 14195 Berlin, Germany

22. Generation of Intense Cluster Ion Beams Through High Voltage Discharge Ionization and

Ablation

Carlos Manzanares and Ansgar Brock

Department of Chemistry, Baylor University, Waco, Texas 76798

23. A SIFT Study of the Reactivity of Cations Derived from Naphthalene with Molecules and Atoms

Valery LePage, Veronica Bierbaum and Theodore P. Snow

Department of Chemistry and Biochemistry, and Center for Astrophysics and Space Astronomy, University of Colorado, Boulder CO, 80302

Monday Posters

1. Thermal Dissociation Of Acetophenone Molecular Ions Activated By Incoherent Infrared Radiation

Marcelo Sena and José M. Riveros

Instituto de Química, Universidade de São Paulo, Caixa Postal 26077, São Paulo, Brazil, CEP 05599-970

2. Strength of alkali metal coordination to N-acetylglucosamine sugars determined by on and off-resonance CID/MALDI/FTMS

Carlito B. Lebrilla, Mark T. Cancilla, Sharon G. Penn

Department of Chemistry, University of California, Davis, CA 95616

3. Theoretical Determination of Glycine Affinity for Li⁺, Na⁺, K⁺, Rb⁺, Cs⁺, Al⁺, and Cu⁺

S. Hoyau and G. Ohanessian

Laboratoire des Mecanismes Reactionnels, Department de Chimie, URA CNRS 1307
Ecole Polytechnique, 91128 Palaiseau Cedex, FRANCE

4. True Gas Phase Protein Sequencing Strategies using Mass Spectrometry: Mechanisms and Energetics of Highly Specific Cleavage Processes

Sang-Won Lee, and J. L. Beauchamp

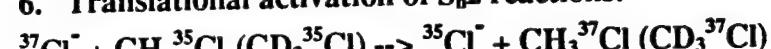
Mail Stop 127-72, California Institute Technology, Pasadena, CA 91125

5. Metal Ion Binding to Biomolecules. Attachment Sites from Bond Energies and Entropy Effects

Chrys Wesdemiotis and Blas A. Cerdá

Department of Chemistry, The University of Akron, Akron, OH 44325-3601

6. Translational activation of S_n2 reactions:



Kent M. Ervin, Vincent F. DeTuri, and Paul A. Hintz

Department of Chemistry/216, University of Nevada, Reno, NV 89557

7. Symmetric and Unsymmetric Halide-Halide interactions. Some examples of Two-Center Three-Electron Bonds.

Andreas J. Illies and Linda S. Nichols

Department of Chemistry, Auburn University, AL 36849-5314

8. State Selective Ion-Molecular Reaction: C₂H₂⁺ + NH₃

Jun Qian, Hunghsin Fu, and Scott Anderson

Department of Chemistry, University of Utah, Salt Lake City, UT 84112

9. Zero-pressure thermal radiatively induced dissociation (ZTRID) in the 'virtual' low pressure regime.

Timothy L. Hoffman and Terrance B. McMahon

Chemistry Department, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada

10. SIFDT study of the formation and dissociation of CO-N₂⁺ ions in a nitrogen buffer

W. Lindinger, J. Glosik, G. Bano, and E.E. Ferguson

Institut für Ionenphysik, Universität Innsbruck, Technikerstrasse 25, 6020 Innsbruck, AUSTRIA

11. Gas phase ion-molecule reactions as models for ion surface collision association reactions

Steven L. Bernasek, Lynn M. Phelan, Julie Flynn, Scott B. Ficarro, and Mark J. Hayward

Department of Chemistry, Princeton University, Princeton, NJ 08544

12. Reactions of methyl cations with small hydrocarbons: Hydride ion transfer and other direct mechanisms

Stefan Mark* and Dieter Gerlich

Institut für Naturwissenschaften, Technische Universität, Reichenhainer Str. 70 D-09107 Chemnitz, Germany
and a) Department of Chemistry, University of California, Berkeley, CA 94720-1460

13. Rare Gas Mediated Methane Activation by Small Transition Metal Cluster Cations
Gerhard Albert, Christian Berg, Martin Beyer, Uwe Achatz, Stefan Joos, Gereon Niedner-Schattburg, and
Vladimir E. Bondybey
Institut für Physikalische und Theoretische Chemie, TU München, Lichtenbergstrasse 4, 85356 Garching,
Germany

14. Photoelectron Spectroscopy of Ions Derived from Cyclooctatetraene
Paul G. Wenthold, and W. Carl Lineberger
JILA, Campus Box 440, University of Colorado, Boulder, CO 80309

15. Dynamics of ion molecule reactions in clusters
A.W. Castleman, Jr., E.M. Snyder, D.A. Card, D.E. Folmer, S. Sato, and S.A. Buzzo
Department of Chemistry, 152 Davey Laboratory, The Pennsylvania State University
University Park, PA 16802

16. A study of the dissociation of CH₃SH⁺ by collisional activation: Observation of non-statistical behavior
P.T. Fenn, S. Stimson, and C.Y. Ng
Department of Chemistry, Iowa State University, Ames, IA 50011

17. A model calculation on interactions between alkali metals and a Si surface: an *Ab- initio* MO study
Akira Shimizu and Hiroto Tachikawa
Graduate School of Engineering, Hokkaido University, Sapporo 060, Japan

18. Intrinsic Reactivity of Metal-Hydroxide Complexes with Electrophiles: Gas-Phase Reactions of [Cp₂ZrOH]⁺ Cations with Alcohols, Amines, Ethers, and Carboxylic Acid Derivatives.
Matthew F. Ryan, David E. Richardson, and John R. Eyler
Department of Chemistry and Physics, Purdue University Calumet, Hammond, IN 46323

19. The interstellar Haber-Bosch process
Murray J. McEwan, Graham B. Scott, David A Fairley, and Colin G. Freeman
Department of Chemistry, University of Canterbury, Christchurch, NEW ZEALAND

20. Gas phase reactions of group 15 EI₂⁺ ions (E = P, As, Sb, and Bi) with n-butyl benzene: periodic changes in the reactivity of group 15 elements
Heinrich L. Sievers, Hans-Friedrich Grützmacher, and Dirk Kirchhoff
University of Bielefeld, Department of Chemistry, P.O.B. 100131, D-33501 Bielefeld Germany

21. Even/Odd Alternation in Styrene Cluster Ions and Intracluster Proton Transfer Reactions
Y. B. Pithawalla, Zhongde Yu, J. Gao, and M. Samy El-Shall
Department of Chemistry, Virginia Commonwealth University, Richmond, VA 23284-2006

22. Distonic Carbene Negative Ions
Jun Hu, Brian T. Hill, Robert R. Squires
Purdue University, Department of Chemistry, West Lafayette, IN 47907-1393

23. Influence of location of ionizing proton(s) on fragmentation of peptides.

Vicki H. Wysocki and Hari Nair,

RN#231, Old Chemistry bldg, Department of Chemistry, University of Arizona,

Tucson, AZ 85721

24. Molecular Dynamics Simulation of Gas Phase Ion Solvation

Orlando M. Cabarcos and James M. Lisy

School of Chemical Sciences, 600 S. Mathews Ave., Box 31-6, Urbana, IL 61801

25. Ion Photodissociation Kinetic Energy Release in an Octopole Ion Guide

Skip Williams, Rainer Dressler, Dale Levandier, and Edmond Murad

Phillips Laboratory/GPOS, 29 Randolph Rd., Hanscom AFB, MA 01731-3010

Tuesday Posters

1. Collision Induced Dissociation within Multiply Charged Ammonia Clusters

Eric Rexer, Robert L. DeLeon, and James F. Garvey

Department of Chemistry, Natural Sciences & Mathematics Complex

State University of New York, University at Buffalo, Buffalo, NY 14260-3000

2. Photoinitiating the S_N2 Reaction, NO₂⁻ + CH₃X → X⁻ + CH₃NO₂ (X = Cl, Br, and I): Using Dipole-Bound Excited States as Doorways to the Electronic Excited States of S_N2 Reactions

Caroline E.H. Dessent and Mark A. Johnson

Department of Chemistry, Yale University, New Haven, Conn.

3. Photoelectron Spectroscopy of Small Cluster Anions; Dipole Bound, Ground State Systems, and their Evolution toward Solvated Electron Species

Helen L. de Clercq, J.H. Hendricks, S.a. Lypustina, and K.H. Bowen

Department of Chemistry, The Johns Hopkins University, Baltimore, MD 21218

4. Rate Coefficients for the Endothermic Reactions: C(²P) + H₂ (D₂) → CH⁺ (CD⁺) + H (D) as Functions of Temperature from 400 - 1300 K

Peter M. Hierl^a, Robert A. Morris, and A.A. Viggiano

Phillips Laboratory, Geophysics Directorate, Ionosphere Effects Division (GPID); 29 Randolph R. Hanscom AFB, MA 01731-3010

a) Permanent Address: Department of Chemistry, University of Kansas, Lawrence, KS 66045-0046

5. Symmetry Induced Kinetic Isotope Effects in the formation of CO₂⁺ + Ar

Gregory I. Gellene and R. K. Yoo

Department of Chemistry and Biochemistry, Texas Tech University, Lubbock, Texas 79409-1061

6. Delayed ejection of phenylethanethiol from a self-assembled monolayer upon ion beam bombardment.

Donald E. Riederer and Nicholas Winograd

Department of Chemistry, 123 Chemistry Building, University of Missouri, Columbia, MO 65211

7. Low energy collision-induced dissociation and photodissociation studies of the (N₂O,H₂O)⁺ cluster ion

Rainer A. Dressler, Dale J. Levandier, Peter B. Armentrout, Michael J. Bastian, Edmond Murad, and Felician Muntean

PL/GPOS, Hanscom AFB, MA 01731-3010; and Department of Chemistry, University of Utah, Salt Lake City, UT 84112

8. Cluster formation and its role in the process of Matrix Assisted Laser Desorption

J. Grottemeyer and A. Meffert

Am Technologiepark 1, 03099 Kolkwitz, Germany

9. Olefin Oxidation by Transition-Metal Dioxides: [2+2] versus [3+2] Route

Detlef Schröder, Jeremy N. Harvey, and Helmut Schwarz

Department of Chemistry, Technical University of Berlin, Strasse des 17 Juni 135 D-10623 Berlin, Germany

10. Gas phase ion-molecule reactions in the identification of chemical warfare related agents in an ion trap mass spectrometer

Sunia Afzaal

Bruker Analytical Instruments, Inc., 19 Fortune Dr. Billerica, MA

11. The Structures and Proton Affinities of Mono-Substituted Phenyl Anions, C₆H₄X⁻ (X = F, Cl, Br, CH₃, C₂H₅, NH₂, OCH₃, CN, CHO, NO₂ and CF₃): A Theoretical Study

Ming Wah Wong

Department of Chemistry, The University of Queensland, Brisbane, QLD 4072, Australia

12. Energetics of Ethylsilane Ion Dissociations Studied by TPEPICO

Jeffrey W. Keister, Paivi Tomperi, Ryan Biddell and Tomas Baer

Chemistry Department, University of North Carolina, Chapel Hill, NC 27599-3290

13. The Gas-Phase Neutral Chemistry of C₂H₂N Radicals: Implications for the Ion Surface.

Paul M. Mayer, Mark S. Taylor, Chris J. Parkinson, and Leo Radom

Research School of Chemistry, Australian National University, Canberra, ACT 0200 Australia

14. Structural Dichotomy in the Electronic States of the CrO₂²⁺ Di-cation

Ilona Kretzschmar, Andreas Fiedler, Detlef Schröder, and Helmut Schwarz

Technische Universität Berlin, D-10623 Berlin, Germany

15. Absolute cross sections of charge transfer reactions of sodium with N₂⁺, NO⁺ and O₂⁺: a guided-ion beam study.

Dale J. Levandier, Rainer A. Dressler, Skip Williams, and Edmond Murad

PL/GPOS, 29 Randolph Road, Hanscom AFB, MA 01731-3010

16. Intramolecular proton bridges in peptides: Effects on fragmentation.

Richard W. Vachet, T. Joon Lee, and Michael R. Asam, and Gary Glish

Chemistry Department, University of North Carolina, Chapel Hill, NC 27599-3290

17. Infrared Photodissociation of Proton Bound Dimers in a FTICR Spectrometer: A study of the interaction of radiation and ions under collision free conditions.

D. Scott Tonner and T.B. McMahon

Department of Chemistry, University of Waterloo, Waterloo, Ontario N2L 3G1 CANADA

18. Evaporation Dynamics of Na⁺(Methanol)₂₋₈

Corey J. Weinheimer and James M. Lisy

School of Chemical Sciences, 600 S. Mathews Ave., Box 48-6, Urbana, IL 61801

19. Chemical Characterization of Radical Anions

Joseph J. Grabowski, Daniel Owusu, and Jiang Zhao

Department of Chemistry, University of Pittsburgh, Pittsburgh, PA 15260

20. Low Energy Guided Ion Scattering for Isomer Analysis.

Zhi Li and Scott Anderson

Department of Chemistry, University of Utah, Salt Lake City, Utah, 84112

21. Electron-Molecular Ion Interactions at Low Energy

Lars Andersen

Institute of Physics and Astronomy, Aarhus University, DK8000 Aarhus C, Denmark
present address JILA, University of Colorado, Boulder, CO 80303

22. Bond Strengths in Polyhalide Ions

Lee Sunderlin, Cynthia Pommerening, Katrina Nizzi, Khanh Do, and Timothy Klein

Department of Chemistry, Northern Illinois University, DeKalb IL 60115

Wednesday Posters

1. Collision Induced Dissociation of Mass Selected Ethylene Cluster Ions (n=2-7)

Michael Y. M. Lyktev, T. Rycroft, and James F. Garvey

Department of Chemistry, NSM Complex, State University of New York at Buffalo, Buffalo, NY 14260

2. Experimental and Theoretical Investigation of FSi(OCH₃)₂(OCH₂)⁻: A Gas Phase Fluoride-Silaoxirane Adduct

Nelson H. Morgan,‡ Andre B. Argenton, Maria L. P. da Silva and José M. Riveros

Institute of Chemistry, University of São Paulo, Caixa Postal 26077, São Paulo, Brazil, CEP 05599-970

‡ Present address: Institute of Chemistry, University of Campinas, Campinas, SP, Brazil

3. Sequential Dehydrogenation of Hydrocarbons by W⁺ in the Gas Phase

G. Ohanessian, P. Mourgues, A. Ferhati, T. B. McMahon

Laboratoire des Micanismes Rictionnels, Ecole Polytechnique, URA CNRS 1307, 91128 Palaiseau Cedex, FRANCE

4. Absolute Total Cross Section Study of the Dissociation Reaction of CH₃OH⁺ by Collisional Activation

Yu-Ju Chen, P.T. Fenn, and C.Y. Ng

Department of Chemistry, Iowa State University, Ames, IA 50011

5. The Fragmentation of Long-lived Protonated Alkylcycloheptatrienes

Dietmar Kuck and Michael Mormann

Department of Chemistry, University of Bielefeld, Germany

6. The Neutral Fragments Formed by Decomposing Biomolecular and Cluster Ions

Chrys Wesdemiotis, Blas A. Cerdá, Michael J. Polce, and Da Ren

Department of Chemistry, The University of Akron, Akron, OH 44325-3601

7. Energy dependence of the proton transfer system $\text{H}_3\text{O}^+ + \text{CH}_2\text{O} \rightarrow \text{CH}_2\text{OH}^+ + \text{H}_2\text{O}$

W. Lindinger, A. Hansel, W. Singer, A. Wisthaler, and M. Schwarzmüller

Institut für Ionenphysik, Universität Innsbruck, Technikerstrasse 25, 6020 Innsbruck, AUSTRIA

8. Energy dependence of the isomerization of HCN^+ to HNC^+ via ion molecule reactions

W. Lindinger, A. Hansel, M. Glantschnig, Ch. Scheiring, and E.E. Ferguson

Institut für Ionenphysik, Universität Innsbruck, Technikerstrasse 25, 6020 Innsbruck, AUSTRIA

9. Comparative ab initio and hybrid DFT studies relevant to an experimental investigation of neutral and cationic $[\text{Si},\text{P},\text{H}_2]$ isomers

Jan Hrušák, Detlef Schröder¹, Helmut Schwarz¹, and Suehiro Iwata²

Institute of Physical Chemistry, Academy of Sciences of the Czech Republic, Dolejškova 3,
CZ-182 23 Praha, Czech Republic

1) Institut für Organische Chemie der Technischen Universität Berlin, Straße des 17. Juni 135,
D-10623 Berlin, Germany

2) Institute for Molecular Sciences, Myodaiji, 444 Okazaki, Japan

10. NeNuPo spectroscopy and femtosecond dynamics of neutral silver trimer

Doo Wan Boo, Yasushi Ozaki, and W. Carl Lineberger

JILA, University of Colorado, Campus Box 440, Boulder, CO 80309

11. Nitrogen Fixation by Transition Metal Oxo Complexes

Martin Beyer, Christian Berg, Gerhard Albert, Uwe Achatz, Stefan Joos, Gereon Niedner-Schäffer, and
Vladimir E. Bondybey

Institut für Physikalische und Theoretische Chemie, TU München, Lichtenbergstrasse 4, 85356 Garching,
Germany

12. Differential NR/CR Spectra to Examine the Neutrals' Reactivity

Detlef Schröder, Christoph A. Schalley, and Helmut Schwarz

Department of Chemistry, Technical Univ. of Berlin, Strasse des 17. Juni 135, D-10623 Berlin, Germany

13. Collision Induced-dissociation dynamics of the enolic acetone cation: Evidence for non-ergodic behavior

Runzhi Zhao, Ronald Tosh, Anil Shukla, and Jean Futrell

Department of Chemistry, University of Delaware, Newark, DE 19716

14. Vibrational-rotational state selectivity in chemical reactions: Gas phase proton transfer reactions



Hiroto Tachikawa

Graduate School of Engineering, Hokkaido University, Sapporo 060, Japan

15. Application of REMPI to High pressure Mass Spectrometry: Polymerization of Propene Initiated by Charge Transfer from Benzene Radical Cation

M. Samy El-Shall, Y. B. Pithawalla, Junling Gao and M. Meot-Ner

Department of Chemistry, Virginia Commonwealth University, Richmond, VA 23284-2006

16. Fundamentals of CID with FT-ICR mass spectrometry: approaching time and collision-energy resolved mass spectrometry

Heinrich L. Sievers, and Hans-Friedrich Grützmacher

University of Bielefeld, Department of Chemistry, P.O.B. 100131, D-33501 Bielefeld, Germany

17. Thermochemistry of Reactive Intermediates from Collision-Induced Dissociation Experiments: The Heat of Formation of Cyclopropylidene and the Electron Affinity of Cyclopropyl Radical

Randal A. Seburg and Robert R. Squires

Purdue University, Department of Chemistry, West Lafayette, IN 47907-1393

18. Theoretical Modeling of Bimolecular Ion-Molecule Dynamics:

Ni⁺ Reactions with C₃H₈ and n-C₄H₁₀

Sung Soo Yi, James C. Weisshaar, M. R. A. Blomberg, and P. E. M. Siegbahn

Department of Chemistry, University of Wisconsin-Madison, Madison, Wisconsin
and Department of Physics, University of Stockholm, Stockholm, Sweden

19. Bimolecular Ion-Molecule Dynamics in Real Time: Co⁺ and Ni⁺ Reactions with C₃H₈ and n-C₄H₁₀

Sung Soo Yi, R. J. Noll, and James C. Weisshaar

Department of Chemistry, University of Wisconsin-Madison, Madison, Wisconsin

20. Ion-surface Reactions on Langmuir-Blodgett Films

Vicki H. Wysocki and Chungang Gu

Department of Chemistry, University of Arizona, Tucson, AZ 85721-0041

21. Two-Component Dissociation Dynamics of Energy Selected Methyl Formate Ions

Oleg A. Mazyar and Tomas Baer

Chemistry Department, University of North Carolina, Chapel Hill, NC 27599-3290

22. Low energy reactive and dissociative collisions of polyatomic ions and dimer ions with a solid surface

Grill and T. D. Märk

Institut für Ionenphysik, Universität Innsbruck, Technikerstrasse 25, 6020 Innsbruck, AUSTRIA

Conference Registration List

GASEOUS IONS, STRUCTURE, ENERG. & REACT.

04-Mar-9

LARS H ANDERSEN JILA, UNIVERSITY OF COLORADO BOX 440	Phone: 303-492-7839 Fax: 303-492-5235 Email: ANDERLH@JILA.COLORADO.EDU
BOULDER, CO 80309	Background: Academic Prof Status: Professor
SCOTT L ANDERSON UNIVERSITY OF UTAH CHEMISTRY DEPARTMENT 2020 HENRY EYRING BLDG SALT LAKE CITY, UT 84112	Phone: 801-585-7289 Fax: 801-581-8433 Email: ANDERSON@CHEMISTRY.UTAH.EDU
	Background: Academic Prof Status: Professor
VINCENT G ANICICH JET PROPULSION LABORATORY M/S 183-601 4800 OAK GROVE DRIVE PASADENA, CA 91109	Phone: 818-354-2439 Fax: 818-393-4605 Email: VINCENT.G.ANICICH@JPL.NASA.GOV
	Background: Academic Prof Status: Research Scientist
PETER ARMENTROUT UNIVERSITY OF UTAH DEPT. OF CHEMISTRY 3402 HENRY EYRING BUILDING SALT LAKE CITY, UT 84112	Phone: 801-581-7885 Fax: 801-581-8433 Email: ARMENTROUT@CHEMISTRY.UTAH.EDU
	Background: Academic Prof Status: Professor
TOM BAER UNIV. OF NORTH CAROLINA AT CHAPEL HILL DEPARTMENT OF CHEMISTRY	Phone: 919-962-1580 Fax: 919-962-2388 Email: BAER@NET.CHEM.UNC.EDU
CHAPEL HILL, NC 27599-3290	Background: Academic Prof Status: Professor
THOMAS BALLY UNIVERSITY OF FRIBOURG INSTITUT DE CHIMIE PHYSIQUE PEROLLES FRIBOURG, CH-1700 SWITZERLAND	Phone: 41-26-3008705 Fax: 41-26-3009737 Email: THOMAS.BALLY@UNIFR.CH
	Background: Academic Prof Status: Professor
JESSE L BEAUCHAMP CALIFORNIA INSTITUTE OF TECHNOLOGY CALTECH 127-72	Phone: 818-395-6525 Fax: 818-568-8641 Email: JLBCHAMP@CCO.CALTECH.EDU
PASADENA, CA 91125	Background: Academic Prof Status: Professor

STEVEN L BERNASEK PRINCETON UNIVERSITY DEPT OF CHEMISTRY WASHINGTON RD & WILLIAM ST PRINCETON, NJ 08544	Phone: 609 258 4986 Fax: 609 258 1593 Email: SBERNA@PUCC.PRINCETON.EDU
	Background: Academic Prof Status: Professor
SOLOMON BILILIGN NORTH CAROLINA A & T STATE UNIVERSITY 1601 EAST MARKET STREET	Phone: 910-334-7646 Fax: 910-334-7283 Email: BILILIGN@GARFIELD.NCAT.EDU
GREENSBORO, NC 27411	Background: Academic Prof Status: Professor
DOO WAN BOO JILA, UNIVERSITY OF COLORADO CAMPUS BOX 440	Phone: 303-492-7770 Fax: 303-492-8994 Email: DWBOO@JILA02.COLORADO.EDU
BOULDER, CO 80309	Background: Academic Prof Status: Post Doctorate
WESTON T BORDEN UNIVERSITY OF WASHINGTON DEPARTMENT OF CHEMISTRY BOX 351700 SEATTLE, WA 98195-1700	Phone: 206-543-6682 Fax: 206-685-8665 Email: BORDEN@CHEM.WASHINGTON.EDU
	Background: Academic Prof Status: Professor
MICHAEL T BOWERS UNIVERSITY OF CALIFORNIA DEPT. OF CHEMISTRY	Phone: 805-893-2893 Fax: 805-893-8703 Email: bowers@sbmm1.ucsb.edu
SANTA BARBARA, CA 93106-9510	Background: Academic Prof Status: Professor
JOHN I BRAUMAN STANFORD UNIVERSITY DEPT. OF CHEMISTRY	Phone: 415-723-3023 Fax: 415-723-0259 Email: brauman@krypton.stanford.edu
STANFORD, CA 94305-5080	Background: Academic Prof Status: Professor
SHEILA BUXTON ROYAL SOCIETY OF CHEMISTRY THOMAS GRAHAM HOUSE SCIENCE PARK, MILTON ROAD CAMBRIDGE, CB4 4WF UK	Phone: 44-1223-432137 Fax: 44-1223-420247 Email: BUXTONS@RSC.ORG
	Background: Academic Prof Status: Other
JERRY B CABALO UNIV. OF NORTH CAROLINA, CHAPEL HILL DEPT. OF CHEMISTRY CB#3290 CHAPEL HILL, NC 27599-3290	Phone: 919-962-1581 Fax: 919-962-2388 Email:
	Background: Academic Prof Status: Student

ORLANDO M CABARCOS UNIVERSITY OF ILLINOIS 600 S. MATHEWS AVENUE BOX 31-6 URBANA, IL 61801	Phone: 217-333-0863 Fax: 217-244-3186 Email: CABARCOS@ARIES.SCS.UIUC.EDU
	Background: Academic Prof Status: Student
A W CASTLEMAN, JR PENNSYLVANIA STATE UNIVERSITY 152 DAVEY LABORATORY DEPARTMENT OF CHEMISTRY UNIVERSITY PARK, PA 16802	Phone: 814-865-7242 Fax: 814-865-5235 Email: AWC@PSUVM.PSU.EDU
	Background: Academic Prof Status: Professor
MICHAEL L CHABINYC STANFORD UNIVERSITY DEPT. OF CHEMISTRY STANFORD, CA 94305-5080	Phone: 415-723-0316 Fax: Email: CHABINML@CHEM.STANFORD.EDU
	Background: Academic Prof Status: Student
YU-JU CHEN IOWA STATE UNIVERSITY DEPARTMENT OF CHEMISTRY 117 WILHELM HALL AMES, IA 50011	Phone: 515-294-3765 Fax: 515-294-5825 Email: YJCHEN@IASTATE.EDU
	Background: Academic Prof Status: Student
GRAHAM COOKS PURDUE UNIVERSITY DEPT. OF CHEMISTRY WEST LAFAYETTE, IN 47907	Phone: 765-494-5263 Fax: 765-494-9421 Email: RGC@SAGE.CC.PURDUE.EDU
	Background: Academic Prof Status: Professor
HELEN DE CLERCQ THE JOHNS HOPKINS UNIVERSITY REMSSEN HALL - CHEMISTRY DEPT. 3400 N. CHARLES ST. BALTIMORE, MD 21218	Phone: 410-516-7454 Fax: 410-516-4679 Email: HELEN@JHUNIX.HCF.JHU.EDU
	Background: Academic Prof Status: Student
CHUCK H DEPUY UNIVERSITY OF COLORADO DEPT. OF CHEMISTRY & BIOCHEMISTRY CAMPUS BOX 215 BOULDER, CO 80309-0440	Phone: 303-492-7652 Fax: 303-492-5894 Email: CHARLES.DEPUY@COLORADO.EDU
	Background: Academic Prof Status: Professor
CAROLINE E DESSENT YALE UNIVERSITY STERLING CHEMISTRY DEPARTMENT P.O. BOX 208107 NEW HAVEN, CT 06520-8107	Phone: 203-432-3988 Fax: 203-432-6144 Email: DESSENT@CLUSTER.CHEM.YALE.EDU
	Background: Academic Prof Status: Student

ITZHAK DOTAN THE OPEN UNIVERSITY OF ISRAEL 16 KLAUSMEN ST. RAMAT-AVIV TEL-AVIV, ISRAEL	Phone: 972-3-6460420 Fax: 972-3-6460582 Email: IDOTAN@OUMAIL.OPENU.QC.IL
RAINER A DRESSLER PHILLIPS LABORATORY, USAF PL/GPID, 29 RANDOLPH RD	Background: Academic Prof Status: Professor
HANSCOM AFB, MA 01731-3010	Phone: 617-377-2332 Fax: 617-377-8202 Email: DRESSLER@PLH.AF.MIL
	Background: Government Prof Status: Research Scientist
ROBERT C DUNBAR CASE WESTERN RESERVE UNIVERSITY CHEMISTRY DEPARTMENT 10900 EUCLID AVENUE CLEVELAND, OH 44106-7078	Phone: 216 368-3712 Fax: 216-368-3006 Email: RCD@PO.CWRU.EDU
	Background: Academic Prof Status: Professor
ODILE M DUTUIT CNRS LPCR BAT 350 CENTRE UNIVERSITAIRE PARIS-SUD ORSAY, 91405 FRANCE	Phone: 33-1-64-468122 Fax: 33-1-64-464118 Email: DUTUIT@LURE.U-PSUD.FR
	Background: Academic Prof Status: Research Director
M. SAMY EL-SHALL VIRGINIA COMMONWEALTH UNIVERSITY DEPT OF CHEMISTRY 1001 WEST MAIN STREET, BOX 2006 RICHMOND, VA 23284-9059	Phone: 804-828-3518 Fax: 804-828-8599 Email: SELSHALL@GEMS.VCU.EDU
	Background: Academic Prof Status: Professor
KENT M ERVIN UNIVERSITY OF NEVADA, RENO DEPARTMENT OF CHEMISTRY/216	Phone: 702-784-6676 Fax: 702-784-6804 Email: ERVIN@CHEM.UNR.EDU
RENO, NV 89557-0020	Background: Academic Prof Status: Professor
JOHN W FARLEY UNIV. OF NEVADA LAS VEGAS DEPT. OF PHYSICS 4505 S. MARYLAND PARKWAY LAS VEGAS, NV 89154	Phone: 702-895-3084 Fax: 702-895-0804 Email: FARLEY@NEVADA.EDU
	Background: Academic Prof Status: Professor
TOM FENN IOWA STATE UNIVERSITY DEPT. OF CHEMISTRY	Phone: 515-294-2048 Fax: 515-294-5825 Email: TFENN@IASTATE.EDU
AMES, IA 50010	Background: Academic Prof Status: Post Doctorate

ELDON FERGUSON 3715 BIRCHWOOD DR. #15 BOULDER, CO 80304	Phone: Fax: Email: FERGUSON@CMDL3.CMDL.NOAA.GOV
JEAN H FUTRELL UNIVERSITY OF DELAWARE DEPT. OF CHEMISTRY & BIOCHEMISTRY 105 BROWN LABORATORY NEWARK, DE 19711	Background: Academic Prof Status: Professor
JAMES F GARVEY SUNY/BUFFALO NSM COMPLEX DEPT. OF CHEMISTRY BUFFALO, NY 14260-3000	Phone: 302-831-1247 Fax: 302-831-6335 Email: JEAN.FUTRELL@MVS.UDEL.EDU
GREGORY I GELLENE TEXAS TECH UNIVERSITY DEPARTMENT OF CHEMISTRY & BIOCHEMISTRY LUBBOCK, TX 79409-1061	Background: Academic Prof Status: Professor
GARY L GLISH UNIVERSITY OF NORTH CAROLINA DEPT. OF CHEMISTRY CB# 3290 CHAPEL HILL, NC 27599-3290	Phone: 716-645-6800 Fax: 716-645-6963 Email: GARVEY@UBVMS.CC.BUFFALO.EDU
JOSEPH J GRABOWSKI UNIVERSITY OF PITTSBURGH DEPARTMENT OF CHEMISTRY 219 PARKMAN AVENUE PITTSBURGH, PA 15260	Background: Academic Prof Status: Professor
EDWARD R GRANT PURDUE UNIVERSITY DEPARTMENT OF CHEMISTRY WEST LAFAYETTE, IN 47907	Phone: 806-742-1994 Fax: 806-742-1289 Email: GELLENE@ALADDIN.CHEM.TTU.EDU
SUSAN T GRAUL CARNEGIE MELLON UNIVERSITY 4400 FIFTH AVENUE PITTSBURGH, PA 15213-2617	Phone: 919-962-2303 Fax: 919-962-2388 Email: GLISH@UNC.EDU
	Background: Academic Prof Status: Professor
	Phone: 412-624-8632 Fax: 412-624-8552 Email: JOEG+@PITT.EDU
	Background: Academic Prof Status: Professor
	Phone: 317-496-9006 Fax: 317-496-2512 Email: EGRANT@CHEM.PURDUE.EDU
	Background: Academic Prof Status: Professor
	Phone: 412-268-1441 Fax: 412-268-1061 Email: SGRAUL@ANDREW.CMU.EDU
	Background: Academic Prof Status: Professor

VERENA GRILL PURDUE UNIVERSITY DEPARTMENT OF CHEMISTRY	Phone: 43-5125076247 Fax: 43-5125072932 Email: VERENA.GRILL@UIBK.AC.AT
WEST LAFAYETTE, IN 6020 AUSTRIA	Background: Academic Prof Status: Post Doctorate
ERIC P GRIMSRUD MONTANA STATE UNIVERSITY DEPARTMENT OF CHEMISTRY	Phone: 406-994-5418 Fax: 406-994-5407 Email: UCHEG@MSU.OSCS.MONTANA.EDU
BOZEMAN, MT 59717-0001	Background: Academic Prof Status: Professor
SCOTT V GRONERT SAN FRANCISCO STATE UNIVERSITY DEPARTMENT OF CHEMISTRY 1600 HOLLOWAY AVENUE SAN FRANCISCO, CA 94132	Phone: 415-338-7709 Fax: 415-338-2384 Email: GRONERTS@LEWIS.SFSU.EDU
	Background: Academic Prof Status: Professor
JUERGEN GROTEMEYER TECHNICAL UNIVERSITY COTTBUS INST. FOR CHEM., BTU COTTBUS, FAKULTAT 1 LS PHYSIKALISCHE CHEMIE, AM TECHNOLOG. 1 KOLKWITZ, D-03099 GERMANY	Phone: 49-355-7841240 Fax: 49-355-7841245 Email: GROTE@CPCG01.COTEC.TU-COTTBUS.DE
	Background: Academic Prof Status: Professor
HANS GRUETZMACHER UNIVERSITY OF BIELEFELD FAKULTAT FUR CHEMIE POSTFACH 10 01 31 BIELEFELD, D-33501 GERMANY	Phone: Fax: Email: GRUETZMACHER@CCHEMA.UNI-BIELEFELD
	Background: Academic Prof Status: Professor
CHRISTOPHER M HADAD OHIO STATE UNIVERSITY DEPARTMENT OF CHEMISTRY 120 WEST 18TH AVENUE COLUMBUS, OH 43210-1173	Phone: 614-688-3141 Fax: 614-292-1685 Email: HADAD.1@OSU.EDU
	Background: Academic Prof Status: Professor
WILLIAM L HASE WAYNE STATE UNIVERSITY DEPARTMENT OF CHEMISTRY 335 CHEMISTRY DETROIT, MI 48202	Phone: 313-577-2694 Fax: 313-577-8822 Email: HASE@SUN.CHEM.WAYNE.EDU
	Background: Academic Prof Status: Professor
PETER M HIERL UNIVERSITY OF KANSAS CHEMISTRY DEPARTMENT	Phone: 913-864-3019 Fax: 913-864-5396 Email: PHIERL@CAC03.CHEM.UKANS.EDU
LAWRENCE, KS 66045	Background: Academic Prof Status: Professor

TIMOTHY L HOFFMANN UNIVERSITY OF WATERLOO CHEMISTRY DEPT.	Phone: 519-885-1211 Fax: 519-885-6388 Email: T2HOFFMA@UWATERLOO.CA
WATERLOO, ON N2L 3G1 CANADA	Background: Academic Prof Status: Student
JOHN HOLMES UNIVERSITY OF OTTAWA DEPT. OF CHEMISTRY	Phone: Fax: Email: JHOLMES@OREO.CHEM.UOTTAWA.CA
OTTAWA, ON K1N 6N5 CANADA	Background: Academic Prof Status: Professor
CARLETON J HOWARD NOAA AERONOMY LAB 325 BROADWAY R/E/AL2	Phone: 303-497-5820 Fax: Email: HOWARD@AL.NOAA.GOV
BOULDER, CO 80303-3328	Background: Government Prof Status: Research Scientist
SOPHIE HOYAU CNRS AND ECOLE POLYTECHNIQUE DCMR-ECOLE POLYTECHNIQUE	Phone: 33-169-333408 Fax: 33-169-333010 Email: SOPHIE@BACH.POLYTECHNIQUE.FR
PALAISEAU CE, 91128 FRANCE	Background: Academic Prof Status: Student
JAN HRUSAK ACADEMY OF SCIENCES INST. PHYS. CHEM. CZECH ACADEMY SCIENCES DOLEJSKOVA 3 PRAGUE, CZ-182 83 CZECH. REPUBLIC	Phone: Fax: Email: HRUSAK@JH-INST.CAS.CZ
JUN HU PURDUE UNIVERSITY DEPT. OF CHEMISTRY	Background: Academic Prof Status: Research Scientist
WEST LAFAYETTE, IN 47907-1393	Phone: 317-494-7359 Fax: 317-494-0239 Email: JUN@GLOW.CHEM.PURDUE.EDU
L. GREGORY HUEY NOAA AERONOMY LABORATORY	Background: Academic Prof Status: Student
BOULDER, CO 80303-3328	Phone: Fax: Email: GHUEY@AL.NOAA.GOV
ANDREAS J ILLIES AUBURN UNIVERSITY DEPARTMENT OF CHEMISTRY	Background: Academic Prof Status: Professor
AUBURN, AL 36849-5312	Phone: 334-844-6968 Fax: 334-844-6959 Email: ILLEAJ@MAIL.AUBURN.EDU
	Background: Academic Prof Status: Professor

MARILYN E JACOX NATIONAL INST. OF STANDARDS & TECHNOLOGY OPTICAL TECHNOLOGY	Phone: 301-975-2547 Fax: 301-975-3038 Email: MARILYN.JACOX@NIST.GOV
GAITHERSBURG, MD 20899	Background: Government Prof Status: Research Scientist
MARK JOHNSON YALE UNIVERSITY - CHEMISTRY P.O. BOX 208107 225 PROSPECT STREET NEW HAVEN, CT 06520-8107	Phone: 203-432-5226 Fax: 203-432-6144 Email: johnson@cluster.chem.yale.edu
	Background: Academic Prof Status: Professor
STEVEN KASS UNIVERSITY OF MINNESOTA DEPT OF CHEM, KOLTHOFF & SMITH HALLS 207 PLEASANT STREET, S.E. MINNEAPOLIS, MN 55455-0431	Phone: 612-625-7513 Fax: 612-626-7541 Email: KASS@CHEM.UMN.EDU
	Background: Academic Prof Status: Professor
HELMUT KECK UNI DUESSELDORF INST.F. ANORG. CHEMIE I UNIVERSITAETSSTR. 1 DUESSELDORF, NRW D-40225 GERMANY	Phone: 49-211-8112199 Fax: 49-211-8112287 Email: KECK@CLIO.RZ.UNI-DUESSELDORF.DE
	Background: Academic Prof Status: Research Director
JEFFREY W KEISTER UNIVERSITY OF NORTH CAROLINA CHAPEL HILL CHEMISTRY DEPARTMENT VENABLE HALL, CB#3290 CHAPEL HILL, NC 27599-3290	Phone: 919-962-1581 Fax: 919-962-2388 Email: JWKEISTE@GIBBS.OIT.UNC.EDU
	Background: Academic Prof Status: Student
BERK KNIGHTON MONTANA STATE UNIVERSITY DEPARTMENT OF CHEMISTRY	Phone: 406-994-5420 Fax: 406-994-5407 Email: UCHBK@EARTH.OSCS.MONTANA.EDU
BOZEMAN, MT 59717	Background: Academic Prof Status: Professor
ILONA KRETZSCHMAR TECHNISCHE UNIVERSITAET BERLIN TU-BERLIN, SEKR. C4, IOC STRASSE DES 17, JUNI 135 BERLIN, D-10623 GERMANY	Phone: 49-30-31426543 Fax: 29-30-31421101 Email: ILONA@WWW.CHEM-TU.BERLIN.DE
	Background: Academic Prof Status: Student
DIETMAR KUCK UNIVERSITY OF BIELEFELD POSTFACH 30 01 31	Phone: 49-5211062060 Fax: 49-5211066146 Email: KUCK@CHEMA.UNI-BIELEFELD.DE
BIELEFELD, D-33501 GERMANY	Background: Academic Prof Status: Professor

VALERY LE PAGE UNIVERSITY OF COLORADO DEPT. OF CHEMISTRY	Phone: 303-492-7396 Fax: 303-492-5894 Email: LEPAGE@COLORADO.EDU
BOULDER, CO 80309-0001	Background: Academic Prof Status: Post Doctorate
SYDNEY LEACH OBSERVATOIRE DE PARIS-MEUDON DEPT. ATOMES ET MOLECULES EN ASTROPHYS. 5, PLACE JULES JANSEN MEUDON CEDEX, 92195 FRANCE	Phone: 33-1-45077561 Fax: 33-1-45077100 Email: LEACH@OBSPM.FR
JULIE A LEARY UNIVERSITY OF CALIFORNIA, BERKELEY COLLEGE OF CHEMISTRY 410 LATIMER HALL BERKELEY, CA 94720	Phone: 510-643-6499 Fax: 510-642-9295 Email: LEARY@GARNET.BERKELEY.EDU
	Background: Academic Prof Status: Professor
CARLITO B LEBRILLA UNIVERSITY OF CALIFORNIA, DAVIS CHEMISTRY DEPARTMENT	Phone: 916-752-6364 Fax: 916-752-8995 Email: CBLEBRILLA@UCDAVIS.EDU
DAVIS, CA 95616	Background: Academic Prof Status: Professor
SANG-WON LEE CALIFORNIA INSTITUTE OF TECHNOLOGY MAIL STOP 127-72 CALTECH PASADENA, CA 91125	Phone: 818-395-2778 Fax: 818-585-9021 Email: LSW@CCO.CALTECH.EDU
	Background: Academic Prof Status: Student
DALE J LEVANDIER ORION INTERNATIONAL TECHNOLOGIES, INC. AIR FORCE PHILLIPS LAB., PL/GPOS 29 RANDOLPH RD. HANSCOM AFB, MA 01731-3010	Phone: 617-377-2331 Fax: 617-377-8202 Email: LEVANDIER@PLH.AF.MIL
	Background: Government Prof Status: Research Scientist
CHAVA LIFSHITZ HEBREW UNIVERSITY OF JERUSALEM DEPT. OF PHYSICAL CHEMISTRY	Phone: 972-2-6585866 Fax: 972-2-6522472 Email: CHAVALU@VMS.HUJI.AC.IL
JERUSALEM, 91904 ISRAEL	Background: Academic Prof Status: Professor
WERNER LINDINGER UNIVERSITY OF INNSBRUCK INSTITUTE OF IONENPHYSIK TECHNIKERSTR.25 INNSBRUCK, 6020 AUSTRIA	Phone: 43-512-5076242 Fax: 43-5125072932 Email: WERNER.LINDINGER@UIBK.AC.AT
	Background: Academic Prof Status: Professor

W. CARL LINEBERGER JILA UNIVERSITY OF COLORADO DEPT. OF CHEM & BIOCHEM, CAMPUS BOX 440 BOULDER, CO 80309-0440	Phone: 303-492-7834 Fax: 303-492-8994 Email: WCL@JILA.COLORADO.EDU
	Background: Academic Prof Status: Professor
 CARLOS MANZANARES Baylor University Department of Chemistry WACO, TX 76798	Phone: 817-755-3311 Fax: 817-755-2403 Email: CARLOS_MANZANARES@BAYLOR.EDU
	Background: Academic Prof Status: Professor
 STEFAN MARK TECHNICAL UNIVERSITY CHEMNITZ-ZWICKAU INSTITUT FUER PHYSIK REICHENHAINER STR. 70 CHEMNITZ, SACHSEN D-09107 GERMANY	Phone: 49-371-5313106 Fax: 49-371-5313103 Email: S.MARK@PHYSIK.TU-CHEMNITZ.DE
	Background: Academic Prof Status: Student
 MICHAEL MAUTNER UNIV. OF CANTERBURY DEPT. OF CHEMISTRY CHRISTCHUCH, 8001 NEW ZEALAND	Phone: Fax: Email: MAUTNER@TUI.LINCOLN.AC.NZ
	Background: Academic Prof Status: Professor
 PAUL M MAYER RESEARCH SCHOOL OF CHEMISTRY AUSTRALIAN NATIONAL UNIVERSITY CANBERRA, ACT 0200 AUSTRALIA	Phone: 61-6-2493771 Fax: 61-6-2490750 Email: PAULM@RSCQC2.ANU.EDU.AU
	Background: Academic Prof Status: Post Doctorate
 OLEG A MAZYAR UNIVERSITY OF NORTH CAROLINA - CH CHEMISTRY DEPT. CB #3290 CHAPEL HILL, NC 27599-3290	Phone: 919-962-1581 Fax: 919-962-2388 Email: MAZYAR@GIBBS.OIT.UNC.EDU
	Background: Academic Prof Status: Student
 RUTH MCDIARMID NIH 5 CENTER DRIVE MSC 0510 BETHESDA, MD 20892-0510	Phone: 301-496-6475 Fax: 301-496-0825 Email: RUT@NIH.GOV
	Background: Government Prof Status: Research Scientist
 MURRAY J MCEWAN UNIVERSITY OF CANTERBURY DEPT. OF CHEMISTRY CHRISTCHURCH, NEW ZEALAND	Phone: 64-3-3642875 Fax: 64-3-3642110 Email: m.mcewan@chem.canterbury.ac.nz
	Background: Academic Prof Status: Professor

SCOTT A MCLUCKEY OAK RIDGE NATIONAL LABORATORY ANALYTICAL CHEMISTRY DIVISION	Phone: 423-574-2848 Fax: 423-576-8559 Email: MCLUCKEYSA@ORNL.GOV
OAK RIDGE, TN 37831-6120	Background: Academic Prof Status: Professor
TERRANCE B McMAHON UNIVERSITY OF WATERLOO DEPARTMENT OF CHEMISTRY	Phone: 519-888-4591 Fax: 519-746-0435 Email: MCMAHON@WATSCI.UWATERLOO.CA
WATERLOO, ON N2L 3G1 CANADA	Background: Academic Prof Status: Professor
RICARDO B METZ UNIVERSITY OF MASSACHUSETTS-AMHERST DEPT. OF CHEMISTRY BOX 34510, LEDERLE GRC AMHERST, MA 01003-4510	Phone: 413-545-6089 Fax: 413-545-4490 Email: RBMETZ@CHEMISTRY.UMASS.EDU
	Background: Academic Prof Status: Professor
JOHN C MILLER OAK RIDGE NATIONAL LABORATORY P.O. BOX 2008, BLDG. 4500S MS-6125 OAK RIDGE, TN 37831-6125	Phone: 423-574-6239 Fax: 423-576-4407 Email: MILLERJC@ORNL.GOV
	Background: Government Prof Status: Research Director
THOMAS H MORTON UNIVERSITY OF CALIFORNIA, RIVERSIDE DEPT. OF CHEMISTRY	Phone: 909-787-4735 Fax: 909-787-4713 Email: MORTON@CITRUS.UCR.EDU
RIVERSIDE, CA 92521-0403	Background: Academic Prof Status: Professor
KLAUS MULLER-DETHLEFS THE UNIVERSITY OF YORK DEPARTMENT OF CHEMISTRY HESLINGTON YORK, Y01 5DD UK	Phone: 44-1904434526 Fax: 44-1904434527 Email: KMD6@YORK.AC.UK
	Background: Academic Prof Status: Professor
GEREON NIEDNER-SCHATTEBURG TECHNISCHE UNIV MUNCHEN INST FUR PHYSIKALISCHE UND THEORETISCHE CHEMIE, LICHTENBERGSTRASSE 4 GARCHING, BAVARIA 85747 GERMANY	Phone: 49-89-28913417 Fax: 49-89-28913418 Email: GEREON@ANIONIX.PHYS.CHEMIE.TU-MU
	Background: Academic Prof Status: Research Scientist
GILLES OHANESSIAN CNRS AND ECOLE POLYTECHNIQUE DCMR-ECOLE POLYTECHNIQUE	Phone: 33-169333503 Fax: 33-169333010 Email: GILLES@BACH.POLYTECHNIQUE.FR
PALAISEAU, CEDEX 91128 FRANCE	Background: Academic Prof Status: Research Scientist

MITCHIO OKUMURA CALIFORNIA INSTITUTE OF TECHNOLOGY CHEMISTRY 127-72	Phone: 818-395-6557 Fax: 818-568-8824 Email: MO@CCO.CALTECH.EDU
PASADENA, CA 91125	Background: Academic Prof Status: Professor
YASUSHI OZAKI JILA, UNIVERSITY OF COLORADO CAMPUS BOX 440	Phone: 303-492-7770 Fax: 303-492-5235 Email: OZAKIY@JILA02.COLORADO.EDU
BOULDER, CO 80309	Background: Academic Prof Status: Research Scientist
RANDALL E PEDDER ABB EXTREL QUADRUPOLE MASS SPECTOMETRY 575 EPSILON DRIVE PITTSBURGH, PA 15238-2816	Phone: 412-967-5774 Fax: 412-963-6578 Email: RANDY@EXTREL.COM
	Background: Industrial Prof Status: Research Scientist
YEZDI B PITHAWALLA VIRGINIA COMMONWEALTH UNIVERSITY DEPARTMENT OF CHEMISTRY 1001, WEST MAIN STREET RICHMOND, VA 23284-2006	Phone: 804-828-7503 Fax: Email: CHE3YBP@ATLAS.VCU.EDU
	Background: Academic Prof Status: Student
FRANCOIS PIUZZI CEA CEA-SACLAY DRECAM-SPAM BAT 522	Phone: 33-16-9083079 Fax: 33-16-9088707 Email: PIUZZI@OLIVE.SACLAY.CEA.FR
GIF SUR VETTE, ESSONNE 91191 FRANCE	Background: Government Prof Status: Research Scientist
VITALII A POKROVSKII ETH ZENTRUM DEPT. ERDWISSENSCHAFTEN NO SONNEGGSTR. 5 ZURICH, CH-8092 SWITZERLAND	Phone: 41-1-6326803 Fax: 41-1-6321179 Email: POKROVSKII@ERDW.ETHZ.CH
	Background: Academic Prof Status: Research Scientist
LYNMARIE A POSEY VANDERBILT UNIVERSITY DEPARTMENT OF CHEMISTRY BOX 1822 STATION B NASHVILLE, TN 37235	Phone: 615-322-4049 Fax: 615-343-0384 Email: POSEYLA@CTRVA.VANDERBILT.EDU
	Background: Academic Prof Status: Professor
ALAN R POTTS UNIV. OF NORTH CAROLINA-CHAPEL HILL DEPT. OF CHEMISTRY CB#3290 CHAPEL HILL, NC 27599	Phone: 919-962-1581 Fax: 919-962-2388 Email: APOTTS@GIBBS.OIT.UNC.EDU
	Background: Academic Prof Status: Student

KIM PRATHER UNIVERSITY OF CALIFORNIA DEPARTMENT OF CHEMISTRY	Phone: Fax: Email: PRATHER@CITRUS.UCR.EDU
RIVERSIDE, CA 92521	Background: Academic Prof Status: Other
 JUN QIAN UNIVERSITY OF UTAH CHEMISTRY DEPARTMENT	Phone: 801-581-6644 Fax: 801-581-8433 Email: JQIAN@ATLAS.CHEM.UTAH.EDU
SALT LAKE CITY, UT 84112	Background: Academic Prof Status: Post Doctorate
 DOUGLAS RAY PACIFIC NORTHWEST LAB. P.O. BOX 999 K2-14	Phone: 509-375-2104 Fax: 509-375-6442 Email: D_RAY@PNL.GOV
RICHLAND, WA 99352	Background: Government Prof Status: Research Scientist
 DOUGLAS P RIDGE UNIVERSITY OF DELAWARE DEPT OF CHEMISTRY AND BIOCHEMISTRY	Phone: 302-8311197 Fax: Email: DOUGR@BRAHAMS.UDEL.EDU
NEWARK, DE 19711	Background: Academic Prof Status: Professor
 DONALD E RIEDERER UNIVERSITY OF MISSOURI DEPT. OF CHEMISTRY 123 CHEMISTRY BUILDING COLUMBIA, MO 65211	Phone: 573-882-1735 Fax: 573-882-2754 Email: CHEMDER@SHOWME.MISSOURI.EDU
	Background: Academic Prof Status: Professor
 JOSE M RIVEROS UNIVERSITY OF SAO PAULO INSTITUTE OF CHEMISTRY CAIXA POSTAL 26077 SAO PAULO- CEP, 05599-970 BRAZIL	Phone: 55-11-818-3888 Fax: 55-11-815-5579 Email: JMRNIGRA@QUIM.IQ.USP.BR
	Background: Academic Prof Status: Professor
 MARY T RODGERS UNIVERSITY OF UTAH DEPARTMENT OF CHEMISTRY HENRY EYRING BUILDING SALT LAKE CITY, UT 84112	Phone: 801-296-2019 Fax: 801-581-8433 Email: RODGERS@CHEMISTRY.UTAH.EDU
	Background: Academic Prof Status: Post Doctorate
 MATTHEW F RYAN PURDUE UNIVERSITY CALUMET DEPT. OF CHEMISTRY AND PHYSICS 2200 169TH STREET HAMMOND, IN 46363	Phone: 219-989-2626 Fax: 219-989-2130 Email: RYANMF@NWI.CALUMET.PURDUE.EDU
	Background: Academic Prof Status: Professor

STEPHAN SCHLEMMER
TECHNICAL UNIVERSITY OF CHEMNITZ
DEPARTMENT OF PHYSICS

CHEMNITZ, SAXONY 09107
GERMANY

DETLEF SCHROEDER
TECHNICAL UNIVERSITY BERLIN
TECHNISCHE UNIVERSITAET BERLIN
SEKR. C4
BERLIN, D-10623
GERMANY

HELmut SCHWARZ
TECHNISCHE UNIVERSITAT BERLIN
INSTITUT FUR ORGANISCHE CHEMIE
FACH. 5 CHEMIE, STRASSE DES 17. JUNI 135
BERLIN, D-10623
GERMANY

RANDAL A SEBURG
PURDUE UNIVERSITY
DEPARTMENT OF CHEMISTRY
1393 BROWN BUILDING
WEST LAFAYETTE, IN 47907

MARCELO SENA
UNIVERSITY OF SAO PAULO
INSTITUTE OF CHEMISTRY
CAIXA POSTAL 26077
SAO PAULO, SP 05599-970
BRAZIL

AKIRA SHIMIZU
HOKKAIDO UNIVERSITY
GRADUATE SCHOOL OF ENGINEERING
KITA-KU
SAPPORO, 060
JAPAN

SEUNG KOO SHIN
UNIVERSITY OF CALIFORNIA, SANTA BARBARA
DEPT OF CHEMISTRY

SANTA BARBARA, CA 93106

HEINRICH L SIEVERS
UNIVERSITY OF BIELEFELD
DEPT. OF CHEMISTRY
POB 100131
BIELEFELD, NRW D-33501
GERMANY

Phone: 49-371-5313049
Fax: 49-371-5313103
Email: SCHLEMMER@PHYSIK.TU-CHEMNITZ.DE

Background: Academic
Prof Status: Research Scientist

Phone: 49-30-31426546
Fax: 49-30-31421102
Email: DF@WWW.CHEM.TU-BERLIN.DE

Background: Academic
Prof Status: Research Scientist

Phone: 49-30-31423483
Fax: 49-30-31421102
Email: SCHW0531@ZRZSP5.CHEM.TU-BERLIN.D

Background: Academic
Prof Status: Professor

Phone: 317-494-7359
Fax: 317-494-0239
Email: SEBURG@GLOW.CHEM.PURDUE.EDU

Background: Academic
Prof Status: Post Doctorate

Phone: 55-118183852
Fax: 55-118155579
Email: MSENA@QUIM.IQ.USP.BR

Background: Academic
Prof Status: Student

Phone: 81-11-706-6577
Fax: 81-11-706-7882
Email: AS@PC.CFA.HOKUDAI.AC.JP

Background: Academic
Prof Status: Research Scientist

Phone: 805-893-2339
Fax: 805-893-4120
Email: SEUNG@SBMM1.UCSB.EDU

Background: Academic
Prof Status: Professor

Phone: 49-521-106206
Fax: 49-521-106614
Email: SIEVERS@CHEMA.UNI-BIELEFELD.DE

Background: Academic
Prof Status: Post Doctorate

GLENN SMITH UNIV. OF CALIFORNIA, BERKELEY DEPT. OF CHEMISTRY	Phone: 501-642-0701 Fax: 501-642-9295 Email: GASMITH@UCLINK4.BERKELEY.EDU
BERKELEY, CA 94720	Background: Academic Prof Status: Student
THOMAS G SPENCE VANDERBILT UNIVERSITY DEPARTMENT OF CHEMISTRY BOX 1822, STATION B NASHVILLE, TN 37235	Phone: 615-322-6499 Fax: Email: SPENCETG@CTRVAZ.VANDERBILT.EDU
	Background: Academic Prof Status: Student
ROBERT R SQUIRES PURDUE UNIVERSITY DEPT. OF CHEMISTRY 1393 BROWN BUILDING WEST LAFAYETTE, IN 47907	Phone: 317-494-7322 Fax: 317-494-0239 Email: SQUIRES@VM.CC.PURDUE.EDU
	Background: Academic Prof Status: Professor
LEE S SUNDERLIN NORTHERN ILLINOIS UNIVERSITY DEPARTMENT OF CHEMISTRY	Phone: 815-753-6870 Fax: 815-753-4802 Email: SUNDER@MARILYN.CHEM.NIU.EDU
DEKALB, IL 60115	Background: Academic Prof Status: Professor
HIROTO TACHIKAWA HOKKAIDO UNIVERSITY GRADUATE SCHOOL OF ENGINEERING KITA-KU SAPPORO, 060 JAPAN	Phone: 81-11-706-7650 Fax: 81-11-706-7897 Email: HIROTO@E2.HINES.HOKUDAI.AC.JP
	Background: Academic Prof Status: Research Scientist
PAIVI H TOMPERI UNIV. OF NORTH CAROLINA AT CHAPEL HILL DEPT. OF CHEMISTRY	Phone: 919-962-1581 Fax: 919-962-2388 Email: PTOMPERI@GIBBS.OIT.UNC.EDU
CHAPEL HILL, NC 27599-3290	Background: Academic Prof Status: Student
DARRYL S TONNER UNIVERSITY OF WATERLOO DEPARTMENT OF CHEMISTRY 200 UNIVERSITY AVENUE WEST WATERLOO, ON N2L 3G1 CANADA	Phone: 519-885-1211 Fax: 519-746-0435 Email: DSTONNER@WATSCI.UWATERLOO.CA
	Background: Academic Prof Status: Student
ALBERT A VIGGIANO PHILLIPS LABORATORY, GPID GEOPHYSICS DIRECTORATE 29 RANDOLPH ROAD HANSCOM AFB, MA 01831-3010	Phone: 617-377-4028 Fax: 617-377-1148 Email: VIGGIARO@PLH.AF.MIL
	Background: Government Prof Status: Research Scientist

COREY J WEINHEIMER
UNIVERSITY OF ILLINOIS
600 S. MATHEWS AVENUE
BOX 48-6
URBANA, IL 61801

Phone: 217-333-0863
Fax: 217-244-3186
Email: WEINHEIM@ARIES.SCS.UIUC.EDU

Background: Academic
Prof Status: Student

JAMES C WEISSHAAR
UNIV. OF WISCONSIN-MADISON
DEPT OF CHEMISTRY
1101 UNIVERSITY AVENUE
MADISON, WI 53706-1396

Phone: 608-262-0266
Fax: 608-262-9918
Email: WEISSHAAR@CHEM.WISC.EDU

Background: Academic
Prof Status: Professor

PAUL G WENTHOLD
UNIV OF COLORADO- JILA
CAMPUS BOX 440

Phone: 303-492-7768
Fax: 303-492-5235
Email: WENTHOLD@EEFUS.COLORADO.EDU

Background: Academic
Prof Status: Post Doctorate

CHRYS WESDEMIOTIS
THE UNIVERSITY OF AKRON
DEPARTMENT OF CHEMISTRY

Phone: 330-972-7699
Fax: 330-972-7370
Email: WESDEMIOTIS@UAKRON.EDU

Background: Academic
Prof Status: Professor

EVAN R WILLIAMS
UNIVERSITY OF CALIFORNIA AT BERKELEY
DEPT OF CHEMISTRY
419 LATIMER HALL #1460
BERKELEY, CA 94720-1460

Phone: 510-643-7161
Fax: 510-642-8369
Email: ERW@GARNET.BERKELEY.EDU

Background: Academic
Prof Status: Professor

SKIP WILLIAMS
PHILLIPS LABORATORY
GPID
29 RANDOLPH ROAD
HANSCOM AFB, MA 01731-3010

Phone: 617-377-2076
Fax: 617-377-8202
Email: SKIPW@PLH.AF.MIL

Background: Government
Prof Status: Research Scientist

MING W WONG
THE UNIVERSITY OF QUEENSLAND
DEPT. OF CHEMISTRY

Phone: 61-733653829
Fax: 61-733654299
Email: WONG@CHEM.CHEMISTRY.UQ.OZ.AU

Background: Academic
Prof Status: Research Scientist

VICKI H WYSOCKI
UNIVERSITY OF ARIZONA
1306 E. UNIVERSITY AVENUE
BOX 21-0041
TUCSON, AZ 85721

Phone: 520-621-2628
Fax: 520-621-8407
Email: VWYSOCKI@U.ARIZONA.EDU

Background: Academic
Prof Status: Research Scientist

THOMAS WYTTENBACH UNIVERSITY OF CALIFORNIA, SANTA BARBARA DEPARTMENT OF CHEMISTRY	Phone: 805-893-2673 Fax: 805-893-8703 Email: WYTTENBACH@SBMM1.UCSB.EDU
SANTA BARBARA, CA 93106	Background: Academic Prof Status: Research Scientist
SUNGSOO YI UNIVERSITY OF WISCONSIN - MADISON 1101 UNIVERSITY AVENUE	Phone: 608-262-0219 Fax: 608-262-9918 Email: SUNGSOO@CHEM.WISC.EDU
MADISON, WI 53706-1322	Background: Academic Prof Status: Student
ALLA N ZELENYUK UNIV. OF NORTH CAROLINA, CHAPEL HILL DEPT. OF CHEMISTRY CB #3290 CHAPEL HILL, NC 27599-3290	Phone: 919-962-1581 Fax: 919-962-2388 Email: ALLA@EMAIL.UNC.EDU
	Background: Academic Prof Status: Post Doctorate